



# Ammunition Advocate



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*The mission of the Executive Director for Conventional Ammunition (EDCA) is to manage and execute activities of a joint-Service nature necessary to carry out the responsibilities of the Single Manager for Conventional Ammunition (SMCA). Responsibilities include oversight of planning, programming, and budgeting for resources to accomplish the SMCA mission; coordinating SMCA related issues with the Services and the Office of the Secretary of Defense; and acting as the focal point on critical joint-Service SMCA issues.*

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The M-40A3 is the new precision fire weapon used by Marine snipers.

**Photo by:** Gunnery Sgt Matt Hevezi

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## O/EDCA Assistant Deputy Rotation

*By Ms. Gail Rote*

On 18 August 2003, the Office of the Executive Director for Conventional Ammunition (O/EDCA) welcomed aboard CDR Robin Husson, Supply Corps, U.S. Navy, as the Assistant Deputy, Executive Director for Conventional Ammunition. CDR Husson replaced Captain Bob Birdwell. CAPT Birdwell assumed duty as the Ordnance Logistics Officer for Commander Fleet Forces Command/Commander, U.S. Atlantic Fleet, and is responsible for managing and coordinating conventional ordnance and nuclear weapons logistics.

CDR Husson is a Supply Corps officer and has served on a fleet ballistic missile submarine

and several surface warfare ships. His shore assignments included the Navy Inventory Control Point at Mechanicsburg, PA, and Commander Naval Surface Force, U.S. Atlantic Fleet (N41) in Norfolk, VA. Prior to joining O/EDCA, he was the Supply Officer on the USS SEATTLE (AOE-3), a fast combat support ship providing fuel, ordnance and provisions to forward deployed ships.

CDR Husson has been selected to the rank of Captain, USN, and will be promoted in 2004.

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## 105mm IR Illumination Round

*By Ms. Sue Hatler*

The Joint Munitions Command (JMC) Combat Ammo Division, in conjunction with PM CAS, has initiated an effort for production of a 105mm Infrared (IR) Illuminating Cartridge for Proof of Principle. The current 105mm M314A3 systems contractor, SNC Technologies, will manufacture a test lot of ammunition under the technical insertion clause of their contract.

SNC will manufacture the IR candle in accordance with the current TDP configuration with the exception of the visible light formulation. In lieu of the visible light

formulation, the IR composition of Black Nite will be utilized.

This will be a two-phase effort with the first phase consisting of firing two ballistic tests at the SNC Canadian test facility to validate and confirm the final configuration. The second phase will consist of production of a Test Lot to be delivered to the Government for evaluation. Milestones for this effort are currently being developed.

*Ms. Hatler is the Program Lead for Artillery Smoke/Illumination Rounds at HQ, Joint Munitions Command and may be reached at, (309) 782-5825, DSN 793-5825.*

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**Spotlight on Industry:*****Cannon Artillery – Still “King of Battle”****By Mr. Dave Pride*

Despite changes in threat and the operational environment, cannon artillery remains a powerful and viable combat force-multiplier for ground force commanders. During Operation IRAQI FREEDOM, it was reported that U.S. Army and Marine Corps forces fired thousands of artillery projectiles. Some of these projectiles were fired at their maximum range, and they were fired to shape the battle and set conditions for the very rapid and successful war.

**GD/Denel 105mm Projectiles**

No other system can deliver such a wide range of effects at extended ranges (30+ kilometers), 24 hours a day, seven days a week, and in all weather conditions. Cannon artillery, in the form of the proposed Future Combat Systems (FCS) Non-Line of Sight-Cannon, will be present on the field of conflict to answer the combatant commander's indirect fire needs by delivering accurate fragmentation, screening smoke, night time illumination and dual purpose improved conventional munitions (DPICM). Other payloads are being developed to augment traditional inventories that will provide multi-spectral screening smoke, infra-red illumination, and non-lethal effects to help in area denial and personnel dispersement.

All of these effects, when coupled with inexpensive course correction fuze (CCF) technology, will provide our future forces with greater capabilities to positively influence the outcome of the engagement at greater ranges than enjoyed today. Increased range and effectiveness correlates into greater force survivability.

To maintain the Field Artillery's mantra of being the "King of Battle," PM Combat Ammunition Systems (PM CAS) and Picatinny Arsenal, N.J. awarded a sole source contract in June 2003 to General Dynamics Ordnance and Tactical

Systems to conduct a safety assessment of long-range 155mm High Explosive and Bi-spectral Smoke artillery projectiles.

This procurement, under the auspices of PM CAS' Advanced Cannon Artillery Ammunition Program (ACA<sup>2</sup>P), supports the Army's Transformation objectives by supplying advanced capabilities to the transforming U.S. Army and Marine Corps. The long range, non-developmental artillery ammunition, designed by Denel of South Africa, offers greater range and added capabilities to current U.S. stockpiles. It is PM CAS' intent to type classify a family of 105mm and 155mm projectiles and fulfill transformation objectives, reinvigorate the ammunition production base in the U.S., and replace aging and depleted stockpiles. Upon achieving successful results, the program will move into gun qualification with a goal of production in 2005.

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***U.S. Army Field Support Command Flatrack Mission****By Mr. EM "Mike" Jones*

The purpose of this article is to describe the U.S. Army Field Support Command's (AFSC) Flatrack/Container Roll-in/Roll-off Platform (CROP) mission that is managed by the Transportation Operations Directorate within the U.S. Army Materiel Command.

This mission was accepted by HQ, AMC, 19 September 2002 in response to Army G-8 correspondence and dialogue. Included within the response was the understanding that \$15M was already in the POM to support the mission. Key responsibilities were outlined in the Army Strategic and Tactical Level Flatrack Management and Accountability Plan, 21 August 2001. Highlights include the worldwide accountability, inventory, maintenance, and over-all program management of Flatracks. Note Flatracks, by definition, include the M1077 (initially fielded in 1994), the M1

**M1 Flatrack**





**M3 Flatrack, Container Roll-in/Out Platform (CROP)**

(intermodal capability) and the M3/M3A1 (CROP).

Critical to the success of the Flatrack Management Center (FMC) will be a method to account and track Flatracks. Pending acceptance by PM AIT is a Project Order to the RFID2 contract that will provide all programming and hardware to support an initial test of Flatrack accountability.

The FMC envisions RF technology as the best method to provide worldwide position information while impacting the field the least. The Army G-4 required this minimal implementation burden on the field. A modified Savi asset management system will be initially populated with current asset locations/serial numbers provided by installations storing Flatracks. Worldwide Flatrack status will be one of "last reported" tag reading and will include exact position and condition as reported at that time. Essential to the FMC's vision will be installation of a new RF tag (#654) on all M1 and M3s. Burned (tag) data will include the permanent Flatrack serial number (read only) and read/write loaded freight details. Once the FMC accepts test data, follow-on software development will follow. The test data is expected to be available in the second quarter FY04.

Possibly as early as third quarter FY04, Flatrack tag burning and placement will begin. This will probably require a contracted effort for at least some of the work. Tagging the CONUS depot stored Flatracks will most likely be

accomplished by depot personnel. Tagging should be completed during FY05.

For more information, the following key individuals are available: Mr. Max Neppel, Chief, FMC, DSN 793-0885 (com 309-782-0885); Email neppelm@osc.army.mil, or Mr. E. M. (Mike) Jones, Chief, Trans Ops Dir, DSN 793-0885 (com 309-782-4980); Email, jonese2@osc.army.mil .

**Mr. Jones is the Chief, Transportation Operations Directorate at Army Field Support Command, Rock Island, IL and may be reached as indicated in the article.**

#### **Spotlight on Industry:**

### **Medico Industries, Inc.: Producing Metal Components for the Department of Defense for Over 50 Years**

*By Mr. Bruce Daniels*

Medico Industries, Inc., located in a 127,000 square floor manufacturing complex in Wilkes-Barre PA, has supplied over 16 million metal parts for the U.S. Department of Defense. The ISO 9001-2000 certified company has been producing metal parts for over 50 years and is best known in military procurement circles for its 60MM and 81MM mortar shells. In fact, this small business firm has supplied in excess of 6.7 million 60MM mortar shells and 1 million 81MM mortar shells.

Medico is a second generation family owned business. Originally established as a modest motor repair business in 1937 by five brothers who were looking for a way out of the coal mines, the company has successfully evolved into a complete manufacturing facility, with full in-house capabilities including cold extrusion, hot forging, heat treating, machining and painting. Since being awarded a contract with the U.S. Air Force as a prime contractor to build aircraft jacks in 1951, the company has focused on increasing production capabilities for the DoD. The company commenced machining and finishing for the Army M48 and M60 tank components during the 1950s. The 1960s was an expansion period for Medico during which production capabilities for the Hydra 70 2.75" rocket warhead parts were established.

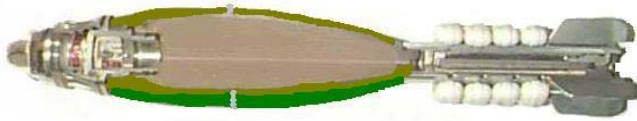
In the 1970s, the company produced parts for the M1 tank program and added forging (hot cup, cold draw process), machining and finishing capabilities for 60MM mortar metal parts. The 1980s saw increased forging capabilities for 60MM parts, as well as forging capabilities for solid nose plugs MXU735/B for the MK80 series bombs. The progress continued into the 1990s, when Medico established hot cup draw forging capabilities for 81MM mortar metal parts, and established forging capabilities for metal parts used in the following: 76MM caliber projectile bodies, 60MM and 81MM



**Flatracks: From Depot to Soldier**

HF-1 mortar cartridges, 25MM OCSW projectiles and 20MM OICW projectiles.

In 1996, Medico took part in a study approved by the DoD which concluded that Medico had the capability and



#### **60MM M720A1/M768 IM HF-1 High Explosive**

technical expertise to manufacture ammunition metal parts from 60MM up to 155MM in both high and low volumes. Medico is the Restricted Specific Base Producer (RSB) and has crisis planned for the following mortar bodies: 60MM/WP/M722 Shell Bodies, 60MM/HE/Shell Bodies, and 81MM/HE/Shell Bodies.

With a reputation for quality product, Medico has highly trained quality technicians performing ultrasonic, hydrostatic, magnetic particle, air pressure and hardness testing.

Medicos' core philosophy is to perform as a self contained operation, producing as many component operations in-house as possible – for example, Medico installed and developed coating processes to meet applicable military specifications. Automated production paint booths allow the application of a wide variety of military specifications paints. A complete salt spray testing facility ensures quality conformance to the product specification.

Medico was the first U.S. company to produce 81MM

projectile bodies from High-Fragmentation steel (HF-1). The mechanical properties, specifically the high carbon, manganese and silicon content, of this steel increase the fragmentation of the shell. Later Medico was awarded a contract to produce 60MM HE projectiles from the HF-1 steel. These mortars were then loaded with Insensitive Munitions (IM) for testing. Hopes were that by using the HF-1 steel, lethality would be maintained when loaded with IM. Test results reported that not only was the mortar now safer for the troops, but the lethality of the round was significantly increased. Since 2001, Medico has been delivering 60MM HE HF-1 rounds for IM loading and 60MM M769 full range training rounds under a five year contract with the Army.

Having a long and varied history of providing products to the DoD does not come by accident. The company prides itself on



#### **60MM M769 Full Range Training Round (FRTR)**

manufacturing flexibility. This flexibility allowed Medico to economically transition from 300,000 60MM projectile bodies per month during the Vietnam conflict to 6,000 60MM projectile bodies per month during periods of reduced demand, while still retaining its core management, administrative and technical staff.

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## **2002 Award for Excellence in Ammunition Management**



**Mr. Motsek, Mr. Risner and CAPT Birdwell**

*By Ms. Diane M. Smith*

Jim Risner, Ammunition Manager assigned as a Senior Logistician in the Office of the Executive Director for Conventional Ammunition (O/EDCA) receives the 2002 Award for Excellence in Ammunition Management from Mr. Gary Motsek, Ammunition Management Career Program's Functional Chief Representative and CAPT Robert Birdwell, USN, O/EDCA. This award is unique in that careerists are nominated and selected by their peers. This year, he served as Secretary to the Single Manager for Conventional Ammunition Special Study Group and as Chairman of the Ammunition Management Career Program (AMCP) Training Committee

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## ***SMCA Directive and Instruction***

*By Mr. James Risner*

As of 29 September 2003, the Office of the Under Secretary of Defense (Acquisition, Technology and Logistics, Defense Systems, Land Warfare and Munitions) ((AT&L)/DS/LW&M) has received formal comments on the DoDD 5160.65. Although the Army has one additional comment on the way regarding conventional ammunition demilitarization, once received the DoDD will be sent to the Deputy Secretary of Defense for signature.

Significant changes in the current draft DoDD from the OSD draft that was staffed to the Military Services on 23 May 2003 are: 1) Changing the definition of conventional ammunition to that found in the March 8, 1995 version (required by DoD General Counsel); 2) the addition of an objective of the SMCA mission functions "To use acquisition strategies that stabilize the business environment and provide incentives for private investment in the production base. Rely on the private sector to create and sustain ammunition production assets in response to production contracts and justify for contingency readiness expanded production capability. To the maximum extent feasible, transition Government-owned ammunition production assets to the private sector while preserving the ability to conduct explosives handling operations safely." and 3) The requirement that the EDCA be senior in rank to the SMCA Executor.

The OUSD(AT&L)/DS/LW&M has received formal comments on DoDI 5160.68 from all Military Services except the Army. The conventional ammunition

demilitarization issue has delayed the Army's response. The issue has recently been resolved by ASA(ALT) with the response due to OUSD shortly. It is unknown at this time what, if any, significant changes were made to the DoDI 5160.68.

Current copies of the DoDD 5160.65 and DoDI 5160.68 will be posted to the Mission page of the O/EDCA website (<http://www.amc.army.mil/edca/>) as soon as they become available.

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***Upon his departure, the  
Office of the EDCA  
wishes fair winds and  
following seas to  
Captain Birdwell.***

## ***Defense Superior Service Medal Awarded***

*By Ms. Diane M. Smith*

Captain Robert J. Birdwell, SC, USN, Assistant Deputy O/EDCA, receives the Defense Superior Service Medal from LTG Richard Hack, EDCA. The medal was given for exceptionally superior service in the O/EDCA from January 2002 to August 2003. CAPT Birdwell led the Joint Service Single Manager for Conventional Ammunition Special Study Group in a bottom-up review of the DoD directive and Instruction for the SMCA mission. He also spearheaded development of a comprehensive set of metrics on the performance of the SMCA enterprise.

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**Caption: LTG Richard Hack presents the medal to CAPT Birdwell**



## *Editor's Note*

This quarter we published articles from contractors, developers, Army organizations and O/EDCA personnel. The material covered ranged from support logistics items to items being researched for possible future use. We want to be able to continue to provide useful information that covers the board spectrum of areas that impact ammunition and ammunition logistics. To do that we need input from our readers.

We would like to have articles submitted from various offices that deal with conventional ammunition in each of the Military Services. Feel free to email your draft article to me at our office address listed below or at my individual email address: [diane.m.smith@us.army.mil](mailto:diane.m.smith@us.army.mil). Note, my email address has changed. We are looking for articles up to one page in length that tell the story of projects being worked or stories that might share information with the ammunition community. Include pictures whenever possible. If you provide the photographer's name, proper credit can be included in the newsletter.

Feedback on this newsletter is appreciated. We are trying to produce a useful newsletter that contains items of interest to everyone in our community.

Diane M. Smith  
Editor

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*Opinions expressed in this newsletter are not necessarily official policy or endorsed by DoD.*

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We hope you enjoyed reading our newsletter and we hope it was informative. We encourage feedback.

If you want more information about a particular topic discussed here, please contact the author directly. Also, if you would like to submit pictures or an article for a future newsletter, please contact us via phone or email. Our point of contact information is shown to the left.

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